SERVICE BULLETIN

KODAK Multiloader ML700 / ML700 PLUS and KODAK Multiloader 700 SIDE BY SIDE KIT

KODAK AG Stuttgart, CUSTOMER EQUIPMENT SERVICES

SERVICE BULLETIN NO. 241

APRIL 1996

3053 *KODAK Multiloader* ML700 / ML700 PLUS
3066 *KODAK Multiloader* 700 SIDE BY SIDE KIT

TABLE OF CONTENTS PAGE

TOUCH UP PAINT **2**
MAGAZINE MOTOR TIME OUT **2**
BLOW PIPE POSITIONER TOOLS **2**
FILM POCKET DETENT SPRING **3**
PARAMETER LOWER POCKET **3**
SPARE PARTS FOR MAGAZINES **3**
INDUCTIVE SENSOR PN 9183486 ..... **3**
CASSETTE CENTRING CLUTCH **3**
POWER SUPPLY ML700 PLUS **4**
FILM JAM AT CONVEYER ENTRY **5**
PARTS LIST CHANGES **6**
LEAF SPRING CHANCE **9**
ML700 WITH PROCESSOR 5000RA **9**
ML700 / ML700 PLUS WITH PROCESSOR 5000 RA **10**
CASSETTE SUPPORT PART NUMBERS **10**
HUMIDIFIER **10**
SBS PARTS CHANGES **11**
MODIFICATION 27 ..... **12**
KODAK MULTILOADER ML700 PLUS SOFTWARE VERSION 5.1 ..... **12**
JUMPER SETTING PCB A9 ..... **13**

© KODAK AG, Stuttgart

TOUCH UP PAINT.

Two different TOUCH UP PAINTS are available.

ML700 / ML700PLUS Version 50 / 60 Hz	**KIESEL GREY PN 9199346**	**GREIGE PN 9189356**
50 Hz Serial Number < 2168	**YES**	**—**
50 Hz Serial Number > 2167	**—**	**YES**
60 Hz Serial Number < 6050	**YES**	**—**
60 Hz Serial Number > 6049	**—**	**YES**

MAGAZINE MOTOR TIME OUT

If a MAGAZINE MOTOR TIME OUT occurs without any obvious reason, check the function of the MAGAZINE OPENER SOLENOIDS.
If for any reason a MAGAZINE OPENER SOLENOID is operating too slowly, the MAGAZINE OPENER MOTOR is already started and the MAGAZINE OPENER SOLENOID ASSEMBLY is lifted. In such a case the SOLENOID PIN is above the MAGAZINE LID and the MAGAZINE is not opened. The ML700 detects that the MAGAZINE is not open, however it cannot detect that the SOLENOID PIN is above the MAGAZINE LID. The MAGAZINE OPENER MOTOR is reversed and the MAGAZINE SOLENOID ASSEMBLY is lowered. As soon as the SOLENOID PIN reaches the top of the MAGAZINE, the complete mechanism is blocked and a MAGAZINE MOTOR TIME OUT occurs.

BLOW PIPE POSITIONER TOOLS

There are 2 different BLOW PIPE POSITIONER TOOLS

TL 4957 is 0.3 mm thick, TL 4582 is 0.8 mm thick.

TL 4957 is for adjusting the MAGAZINE BLOW PIPES of the ML700. You must not use TL 4582 for this adjustment. TL4582 is the proper tool for the XML300.

ML700 / ML700 PLUS

XML300

figure 1

 © KODAK AG, Stuttgart

FILM POCKET DETENT SPRING

Up to SN 2257 (50Hz) and SN 6191 (60Hz) the DETENT SPRING 9183751 was used. Now the stronger DETENT SPRING 9229880 is used instead. If at the older units the FILM POCKET ARM does not stay stable in the DETENT POSITION, replace the SPRING 9183751 with 9229880.

PARAMETER LOWER POCKET

The factory setting of PARAMETER LOWER POCKET is now 19h. If on your unit another value is set and works correctly, there is no reason to change.

SPARE PARTS FOR MAGAZINES

It might be possible that spare parts do not fit correctly to the MAGAZINE. In this case order a complete MAGAZINE CAT. No. 7094824. The MAGAZINES are assembled with matching parts.

INDUCTIVE SENSOR PN 9183486

The INDUCTIVE SENSOR 9183486 consists of INDUCTIVE SENSOR, GUIDE SHOE and SENSOR MOUNT 9183476. The GUIDE SHOE is already glued into the correct position by manufacturing.

CASSETTE CENTRING CLUTCH

Due to wear of the CASSETTE CENTRING CLUTCH, the torque is reduced over the time. To compensate for this, tighten the CASSETTE CENTRING CLUTCH by 1 step every 400000 actuations. Do this adjustment during a PM. See the drawings on the next page.

1. Take out the COUNTERSUNK SCREW.

2. Turn the CLUTCH RING 1 step clockwise and fix it with the COUNTERSUNK SCREW.

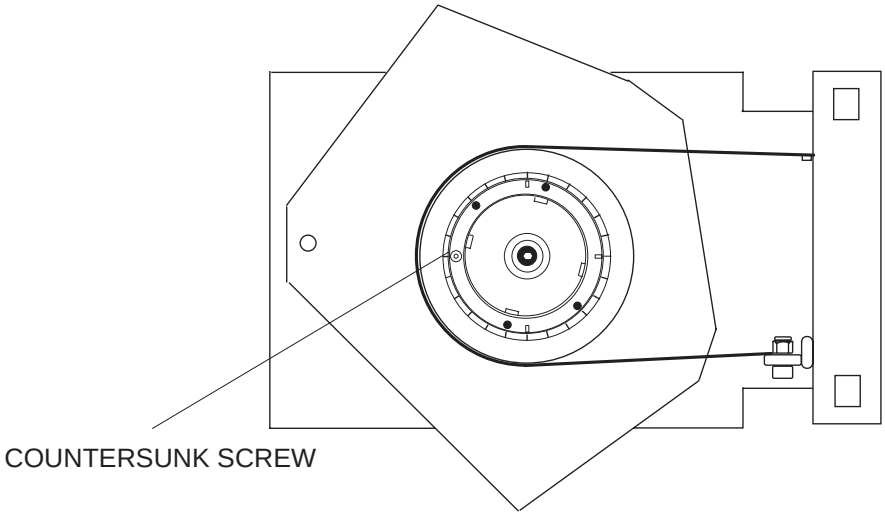

figure 2

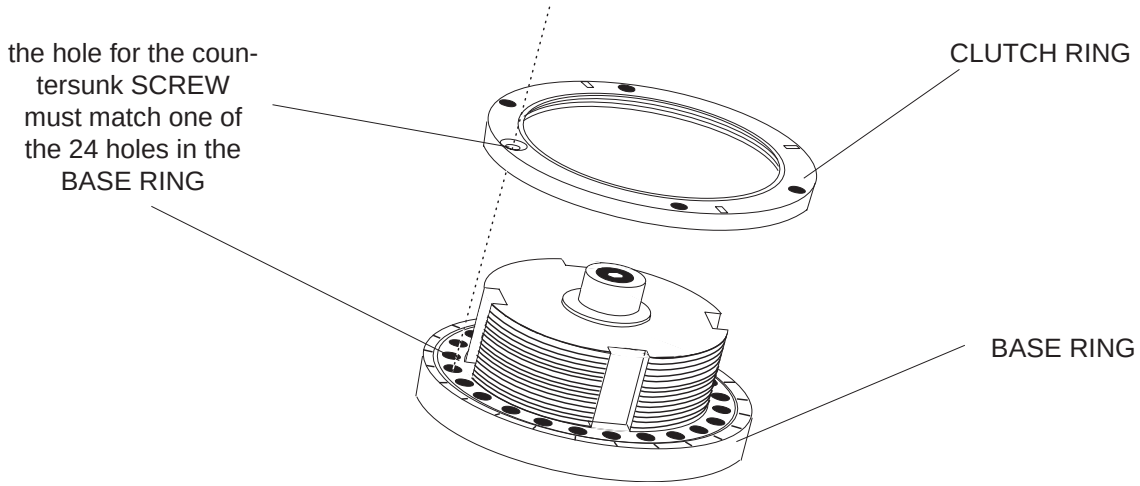

figure 3

POWER SUPPLY ML700 PLUS

Starting with SN 3044 (50Hz) and SN 7036(60Hz) the POWER SUPPLY 9281906 is installed. It replaces the POWER SUPPLY 9191906.

NOTE

The new POWER SUPPLY 9281906 can also be used in the ML700.

 © KODAK AG, Stuttgart

FILM JAM AT CONVEYER ENTRY.

Some CASSETTES have a large curvature. These CASSETTES do not open far enough in a ML700/ML700 PLUS and the FILM is clamped between the LID SCREEN and TUBE SIDE SCREEN at the hinge side of the CASSETTE. The CASSETTE SUCKER BAR tries to pull the FILM out of the CASSETTE and the FILM is suddenly reeased. If this happens with a CASSETTE 35x35cm the leading edge of the FILM may snap into the gap between DEFLECTOR and its PLASTIC MOUNT. If you experience this problem, install the new DEFLECTORS.

	old	new
DEFLECTOR LH	9185526	9285526
DEFLECTOR RH	9185336	9285336

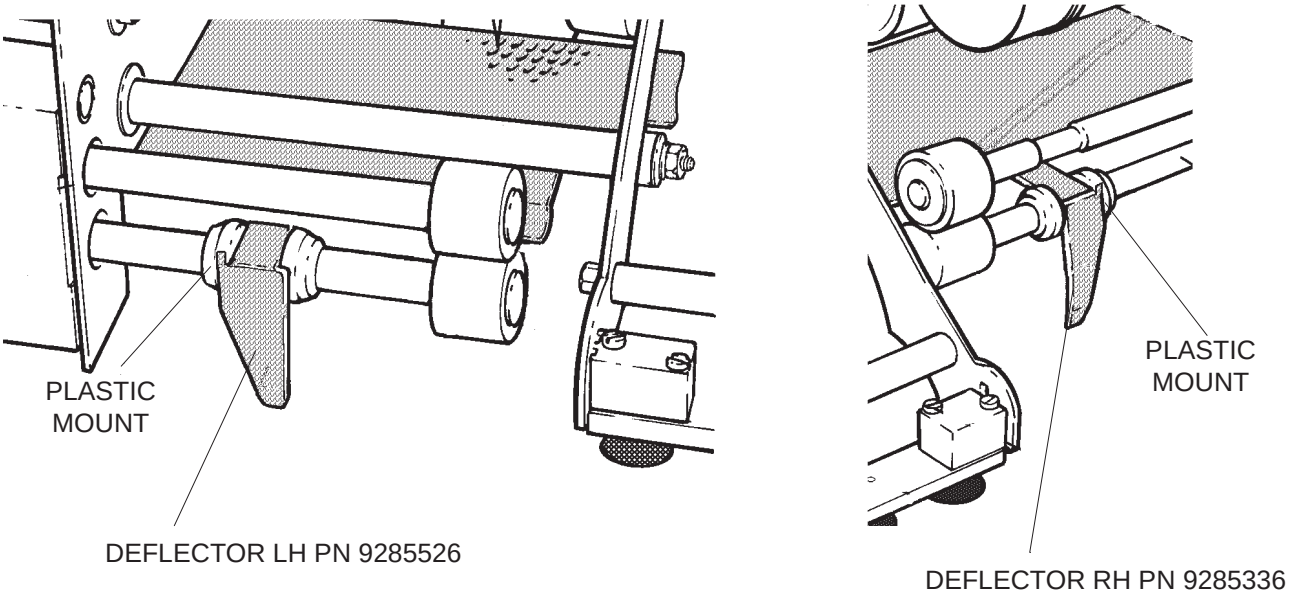

figure 4

PARTS LIST CHANGES

Change the following in the PARTS LIST IP 3053 Sept. 95:

Page 1-3 PARTS LISTING figure 1-1

In topic FROM SN 2168(50Hz) / 6050(60Hz)
Change item 3 to:
3.....9189706.....KEYBOARD ASSY.....1

Page 2-21 PARTS LISTING figure 2-10

Item 13 WASHER 4470700 is replaced with:
13.....9282981.....WASHER 25 mm.....2

Page 3-2 figure 3-1

Change CALLOUT 11 with 12.

Page 4-2 figure 4-1

Add CALLOUT 15.See figure 5.

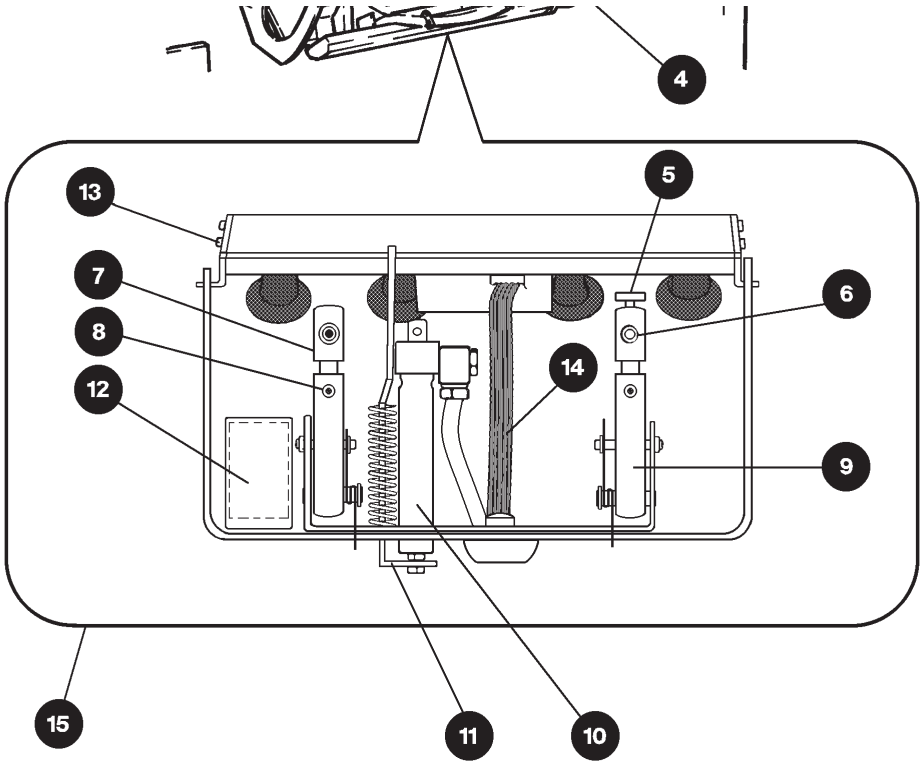

figure 5

Page 4-3 PARTS LISTING figure 4-1:

15.....9184506.....MAGAZINE SUCKER BAR ASSEMBLY
includes items 5 to 13 and SUCKER BAR ASSY
item 10 figure 4-2.....1

 © KODAK AG, Stuttgart

Page 4-5 PARTS LISTING figure 4-2

Change item 10 to:
10.....9184689.....SUCKER BAR ASSEMBLY includes items 2 to 9.....1

Page 4-11 PARTS LISTING figure 4-5

For ML700 PLUS with SN > 3067 (50Hz)
SN > 7064 (60Hz)

6.....9284541.....CONNECTING ROD.....1
4500551.....C-RING.....1

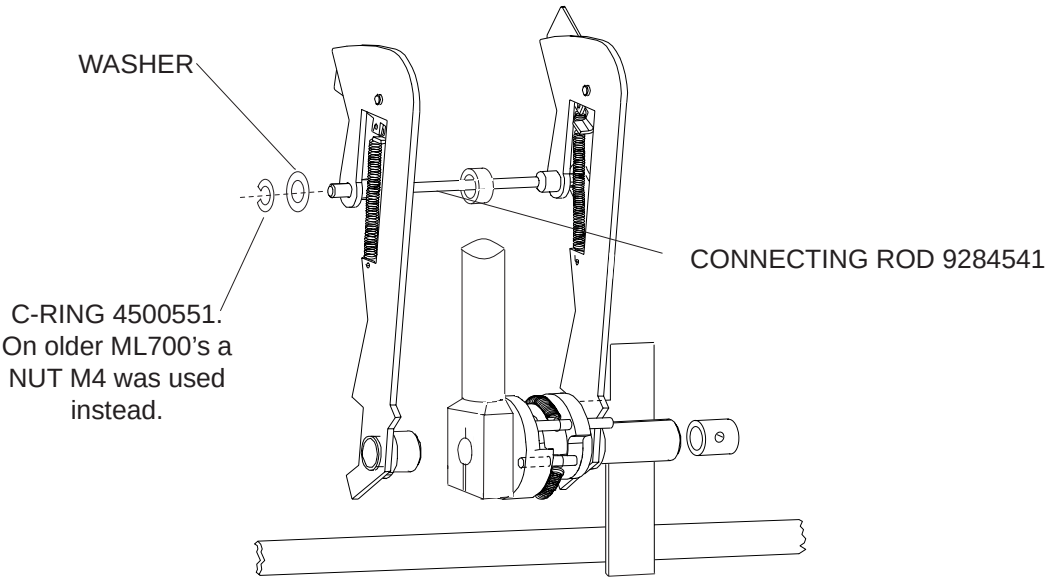

figure 6

NOTE

The C-RING is used to secure the CONNECTING ROD at the left-hand side. On older ML700's the CONNECTING ROD was secured with a NUT M4.

Page 12-9 PARTS LISTING figure 12-4

Change item 7 to:
7.....9188586.....BELT.....1

Page 14-28 figure 14-24. Correct the LAYOUT of PCB A0 as shown on the next page.

PCB A0

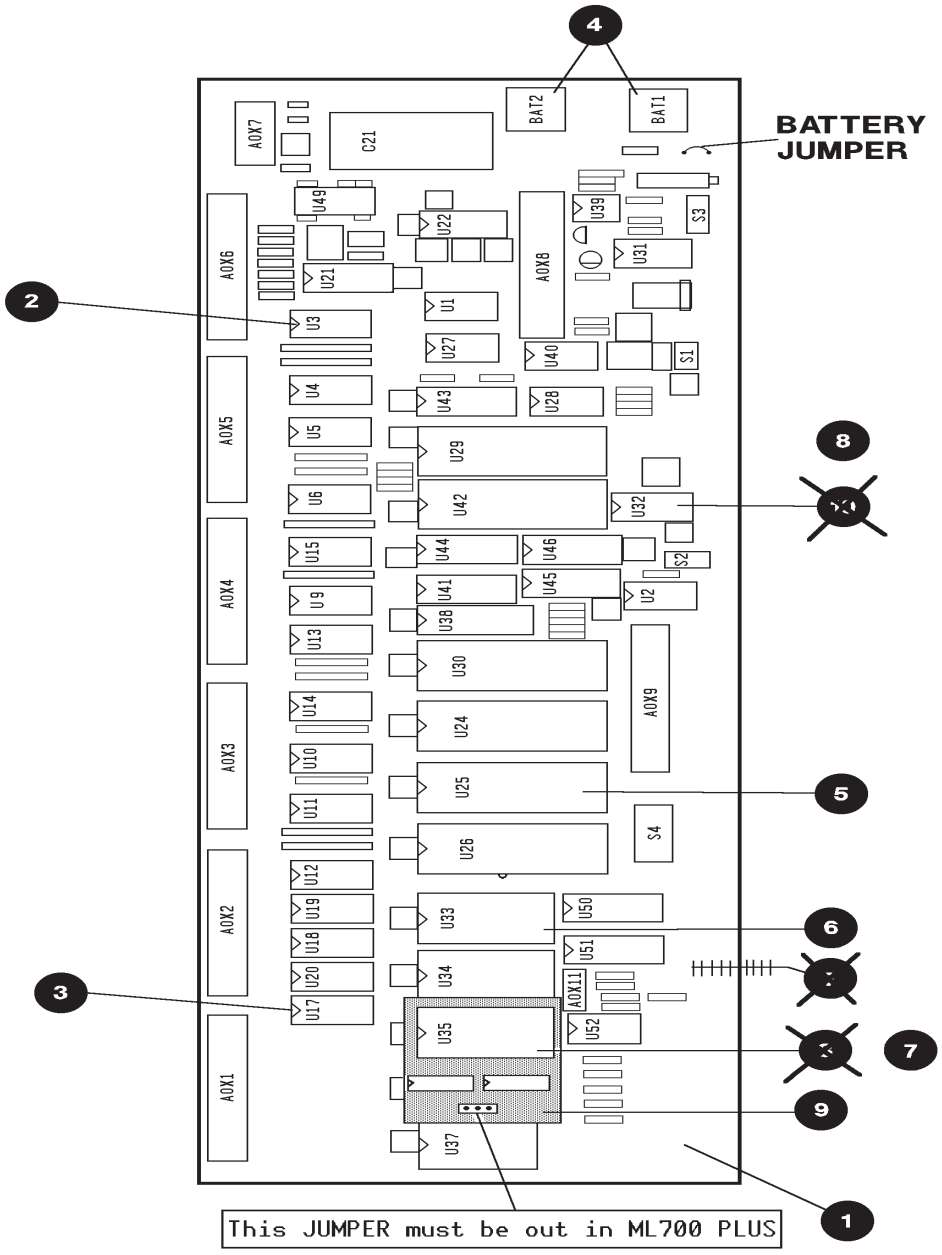

figure 7

 © KODAK AG, Stuttgart

Page 14-29 PARTS LISTING figure 14-14. Add item 9

9.....9281100.....PCB A15 (PIGGY BACK PCB for U35 PCB A0.....1

LEAF SPRING CHANGE

The LEAF SPRING 9193291 was introduced with Mod. 17. The purpose of this SPRING is to prevent the ACTUATOR WIRES of SWITCHES S1, S2 and S3 from staying in the upper position. In some cases however the short ACTUATOR WIRE stayed still in the upper position. To avoid this the new LEAF SPRING is slotted.

old LEAF SPRING	9193291
new LEAF SPRING	9283291

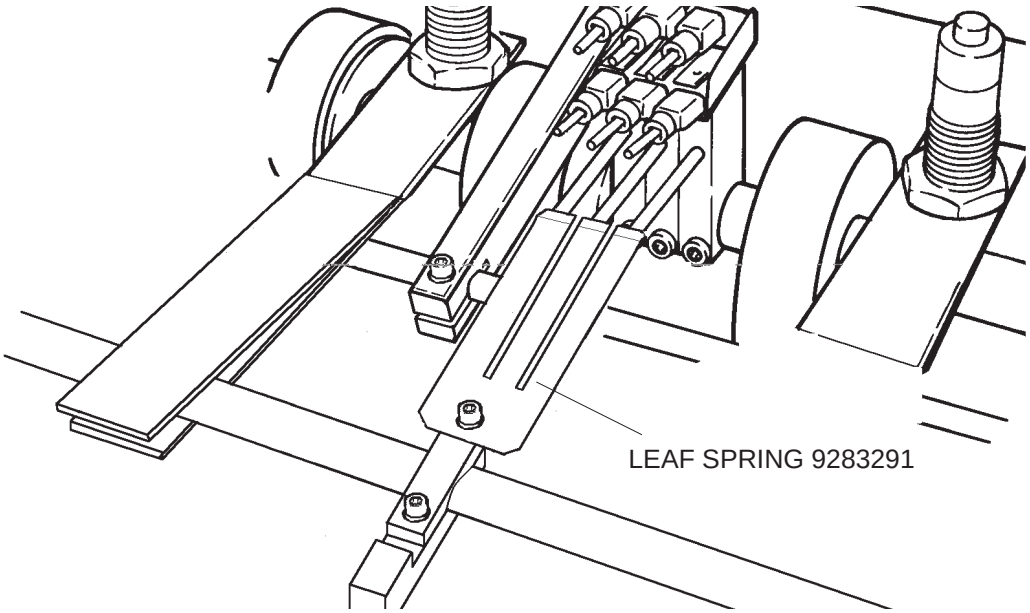

figure 8

ML700 WITH PROCESSOR 5000RA

If in an existing ML700 installation the PROCESSOR M8 is replaced with a PROCESSOR 5000 RA, the ADAPTER PLATE 9188594 with 2 CENTRING BOLTS 9188616 is needed. These parts had been delivered with the ML700 TUNNEL at the time of installation. If they are no longer available at the customer site order them prior to the installation of the 5000RA.

ML700 / ML700 PLUS WITH PROCESSOR 5000 RA

If a ML700 / ML700 PLUS is combined with a PROCESSOR 5000 RA the KODAK MULTILOADER 700 PROCESSOR READY KIT FOR KODAK X-OMAT 480 RA (CAT. No. 7119837) is required. Ensure that PARAMETER PROCESSOR FLAG is set to 1 if used without SBS and to 2 if an SBS is used. If this PARAMETER is not set correctly, the ML700 / ML700 PLUS will not recognise if the 5000 RA goes into the SLEEP MODE.

CASSETTE SUPPORT PART NUMBERS

The following SCREWS from the CASSETTE SUPPORT are available as spare parts:

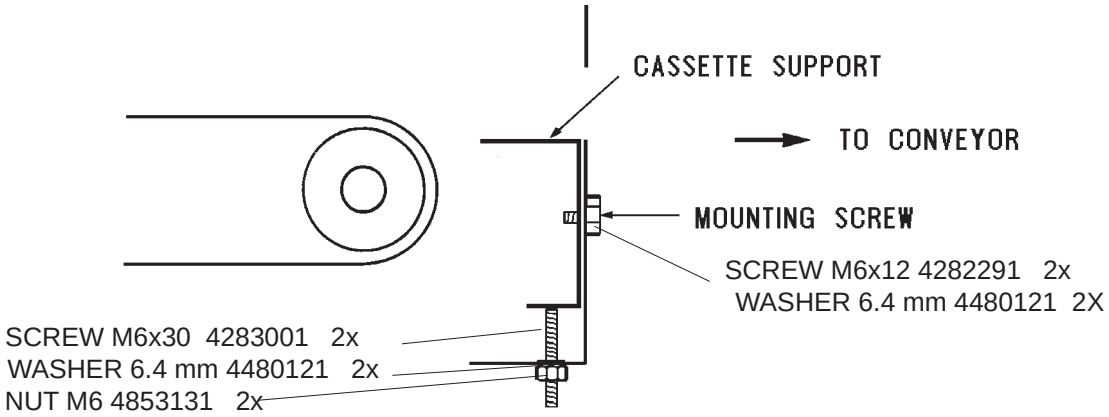

figure 9

HUMIDIFIER

The RESISTOR in the HUMIDIFIER is changed from 56 Ω to 27 Ω. The part number of the 27 Ω RESISTOR is 9281046.

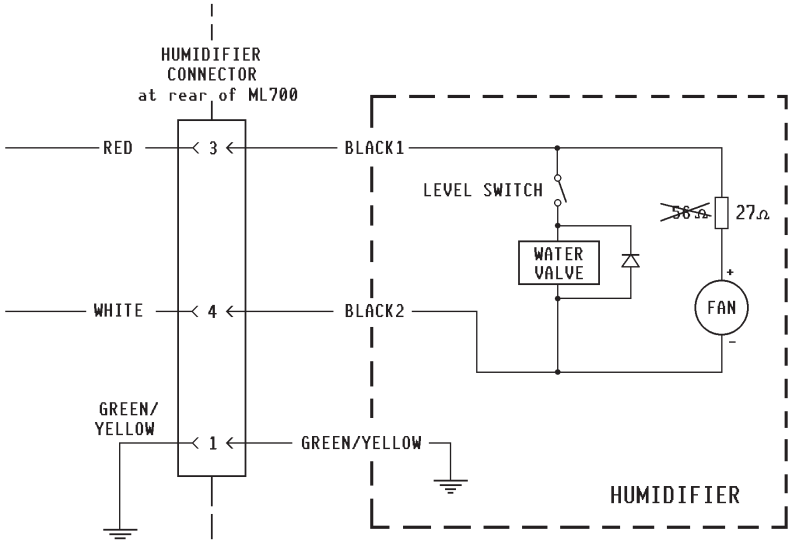

figure 10

 © KODAK AG, Stuttgart

SBS PARTS CHANGES

Add the following Part Numbers to the SBS PARTS LIST IP 3066 3/1995

Page 1-14 figure add item 3 and 4

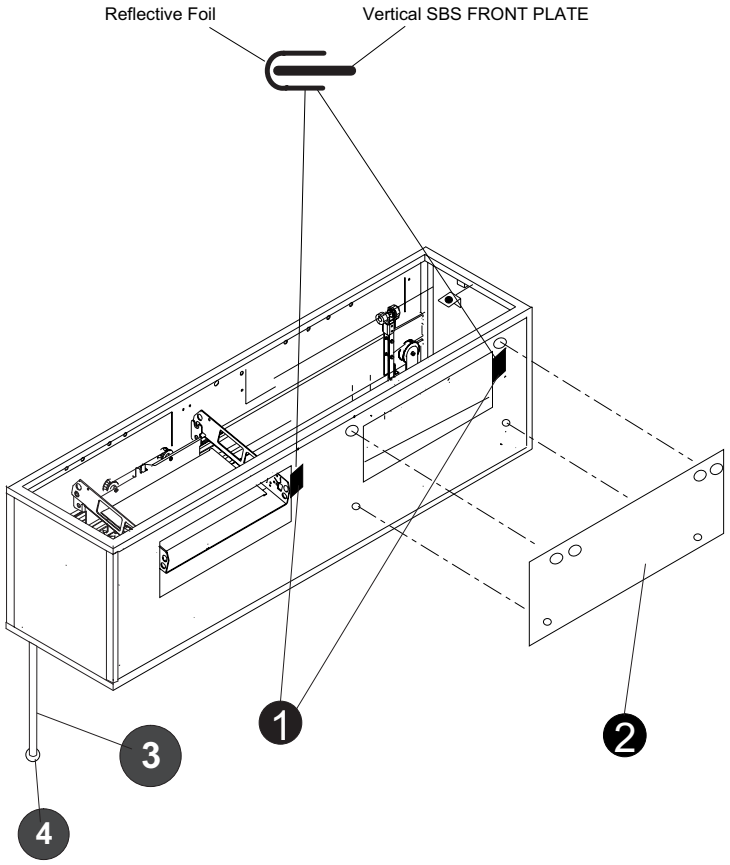

figure 11

Page 1-15 PARTS LISTING figure 1-7

3.....9261676.....SUPPORT LEG.....3
4.....9261666.....LEVELLING FOOT.....3

Parts List IP 3066 3/1995 Page 2-5 Item 3

The DRIVE GEAR 9216111 is replaced with DRIVE GEAR 9260026. The new DRIVE GEAR is a flanged. It ensures that the DRIVE BELT does not run off the DRIVE GEAR.

The TOOL for releasing the SBS from the ML700 has the PART NUMBER 9260796.

Parts List IP 3066 3/1995 Page 1-10 and 1-11.

6 WASHERS (3 on each side) are added between the TIMING BELT TENSIONER 9260616 and its MOUNTING PLATE. This improves the alignment between the TIMING BELT and the PULLEYS left and right. See the drawing on the next page.
13.....4480051.....WASHER.....6

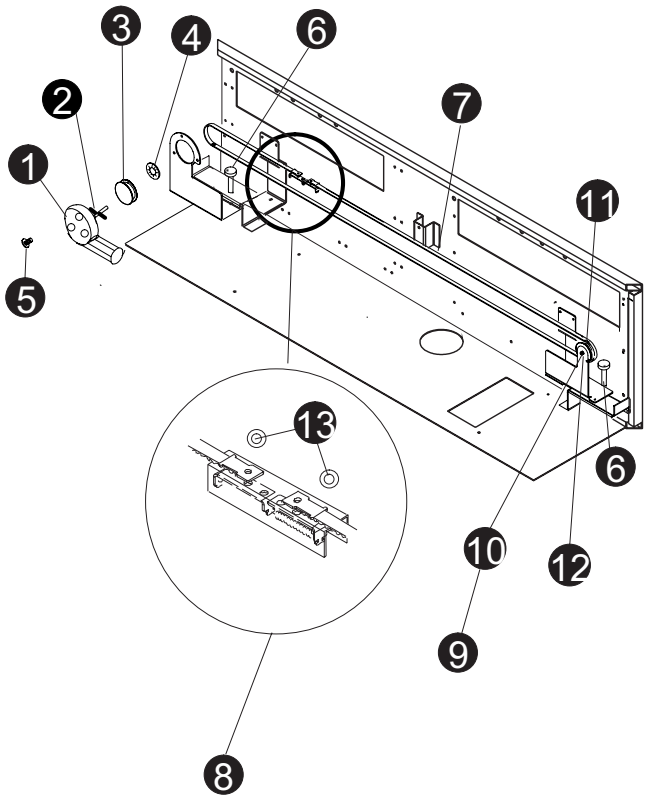

figure 12

MODIFICATION 27

In the MODIFICATION INSTRUCTIONS for modification 27 Pub. No. MA 3053-27 11/95 is a printing error on page 9. Step 3 should read:

3. Connect the DVM to TP5 (+) and TP (2) (Gnd) of PCB A16.

KODAK MULTILOADER ML700 PLUS SOFTWARE VERSION 5.1

Starting with SN 3128 (50Hz) and 7077(60Hz) SOFTWARE VERSION 5.1 Part No. 9285016 is installed.

Differences between version 5.1 and 5.0:

1. The DEFAULT VALUE for PARAMETER LOWER POCKET is now 19. It was 00. If a MAMMOGRAPHY CASSETTE or a VIDEO FILM HOLDER is used, the PARAMETER LOWER POCKET goes automatically to 00.

2. The MAGAZINE DOOR is recognised as closed, if it was closed for 2 seconds. This avoids problems with reading the MAGAZINE SIZE if the door was closed accidentally and then opened again immediately.

 © KODAK AG, Stuttgart

3. The DOUBLE FILM RECOGNITION is improved. If a DOUBLE FILM is sensed, the FILM POCKET ARM is stopped for a short time to stabilise the FILM. It is now easier to bring the FILMS back into the MAGAZINE.

JUMPER SETTING PCB A9

If a SIDE-BY-SIDE KIT is installed to a ML700 PLUS, JUMPER X15 on PCB A9 PLUS must be set accordingly to the table below:

SIDE-BY-SIDE	TUNNEL
A9X15 1-3	A9X15 3-5
A9X15 2-4	A9X15 4-6

In America:
For more information, please contact:

Eastman Kodak Company
Health Imaging Division
343 State Street, 3rd fl, Bldg 20
Rochester, NY 14650-1131

(800) 336-4722, Press 2

Please be prepared to give your Customer Number and your equipment serial number.

In all other regions:
For more information, please contact:

Kodak AG Stuttgart
CES
Hans Miller
MC 2104
D- 70327 Stuttgart

PHONE (49) 711 406 2736
FAX (49) 711 406 2515

Kodak and *X-Omat* are trademarks

© KODAK AG, Stuttgart